



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/508,379 06/08/00 LEVY

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EXAMINER

MOONAN, F

ART UNIT

PAPER NUMBER

1638

DATE MAILED:

09/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/508,379

Applicant(s)

LEVY ET AL.

Examiner

Francis Moonan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-45 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-8, 12-17, 22-25, 32, and 37-44 drawn to a method of making a miniature plant with mutation-inducing treatment, such that the miniature plant is selected for a desired trait, and a miniature plant or population of miniature plants made with said mutation-inducing treatment method .

Group II, claims 2, 9-11, 14-17, 23, 26, 28-31 drawn to a method of making a miniature plant with native transposable elements, such that the miniature plant is selected for a desired trait, and a population of miniature plants made with said transposable element mutagenesis method .

Group III, claims 2, 9, 14-17, 23, 26, 27, and 45 drawn to a method of making a miniature plant with T-DNA , such that the miniature plant is selected for a desired trait, and a population of miniature plants made with said T-DNA mutagenesis method.

Group IV, claims 2, 9, 14-17, 23, 29-31, and 45 drawn to a method of making a miniature plant with genetic engineering and transposable element insertion into the genome of a miniature plant, such that the miniature plant is selected for a desired trait, and a population of miniature plants made with said genetic engineering method.

Group V, claims 18-21, drawn to a method of utilizing PCR for identifying a miniature plant containing a transposable element mobile DNA sequence .

Group VI, claims 18-20, drawn to a method of utilizing PCR for identifying a miniature plant containing a T-DNA mobile DNA sequence.

Group VII, claims 33-36, drawn to a method of identifying and cloning cell and tissue

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specific expression enhancer element DNA sequences from a miniature plant genome utilizing TDNA and reporter gene DNA sequences in a promoterless or minimal promoter DNA fusion construct produced in a population of miniature plants.

Group VII, claims 33-36, drawn to a method of identifying and cloning cell and tissue specific expression enhancer element DNA sequences from a miniature plant genome utilizing transposable element and reporter gene DNA sequences in a promoterless or minimal promoter DNA fusion construct produced in a population of miniature plants.

Claims 2, 9, 14-20, 23, 26, 29-31, 33-36, and 45 each recite more than one invention, and will be examined to the extent that that read on an elected Group.

The inventions listed as Groups I-VIII above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature linking Groups I-VIII appears to be a miniature plant.

However, a miniature plant lacks an inventive step or is not novel in view of Scott et al (1989. Florida Agric. Expt. Station Circ. 370-1-6), and Bishop et al (June 1996. The Plant Cell 8:959-969).

Therefore, the technical feature linking the invention of Groups I-VIII does not constitute a special technical feature as defined by PCT Rule 13.2, because it does not define a contribution over the prior art.

The special technical feature of Group I is that it is a method of making a plant with mutation-inducing agent treatment, such that the plant is selected for a desired trait, and a plant or plant population made by said mutation-inducing treatment method.

The special technical feature of Group II is that it is a method of making a plant with native transposable elements, such that the plant is selected for a desired trait, and a plant population made with said transposable element method.

The special technical feature of Group III is that it is a method of making a plant with T-DNA insertion into its genome such that it is selected for a desired trait, and a plant population made with said T-DNA mutagenesis method.

The special technical feature of Group IV is that it is a method of making a plant with genetic engineering and transposable elements, such that the plant is selected for a desired trait, and a plant population made by said genetic engineering method.

The special technical feature of Group V is that it is a method of utilizing PCR for identifying a plant containing a transposable element mobile DNA sequence.

The special technical feature of Group VI is that it is a method of utilizing PCR for identifying a plant containing a T-DNA mobile DNA sequence.

The special technical feature of Group VII is that it is a method of identifying and cloning cell and tissue specific expression enhancer element DNA sequences from a plant genome utilizing T-DNA and reporter gene DNA sequences in a promotorless or minimal promoter DNA construct produced in a population of plants.

The special technical feature of Group VIII is that it is a method of identifying and cloning cell and tissue specific expression enhancer element DNA sequences from a plant genome utilizing transposable element and reporter gene DNA sequences in a promotorless or minimal promoter DNA construct produced in a population of plants.

Groups I-VIII are distinct plants and methods or such that the starting materials or method steps of each group are different and not required by others.

The starting materials of the methods of making of Groups I-VIII are not required of each other, and the products made in Groups I-IV are chemically and structurally distinct, such that elements of one group are not required of the others. The methods of Groups V and VI require PCR steps that are not required for the methods of Groups I-IV or the plants of Groups I-IV. The mutation-inducing treatment of the method of Group I, for example chemical and UV mutagenesis, are not required of the methods of Groups II-VIII. The use of T-DNA in the method and plants of Groups III, VI and VII are not required of the plants and methods of Groups I, II, and IV, or the methods of Groups V and VIII. The use of transposable elements in the plants and methods of Groups II, IV, V and VIII are not required of the plants and methods of Groups I and III and the methods of Group VI and VII. The transposable element composition of the plants of Groups II and IV are chemically and structurally distinct, for example the plants of Group IV have Agrobacterium or other plasmid DNA sequences fused to non-native transposable element DNA sequences that are not required by the plants of Group II, and the method of Group IV does not require the native transposable elements of the method of Group II. The methods of Groups VII and VIII require promoterless constructs or minimal promoter constructs each fused to a reporter gene, and methods for cloning putative enhancer elements, each not required by any other Group.

Therefore, the claims are not so linked by a special technical feature within the meaning of PCT Rule 13.1 so as to form a single general inventive concept.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Francis Moonan, whose telephone number is (703) 605-1201. The examiner can normally be reached on Monday through Friday 9:00 AM to 5:00 PM (E.S.T.) .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Hutzell, can be reached at (703) 308-4310. The fax phone number for this Group is (703) 308-4315. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Francis Moonan, Ph. D.

5 September 2001

DAVID T. FOX
PRIMARY EXAMINER
GROUP 180-1638

A handwritten signature in cursive script, appearing to read "David T. Fox", written in black ink.